AMENDMENTS TO THE DRAWINGS

The attached Replacement Drawing Sheet includes amended Fig. 12. Please replace the drawing sheet including Fig. 12 with the Replacement Drawing Sheet including amended Fig. 12 attached herewith. The numeric identifier "20" in Fig. 12 is replaced with --520--.

Attachments: Replacement Drawing Sheet
Annotated Drawing Sheet

REMARKS

Favorable reconsideration of the above-identified application is requested in view of the following remarks.

Claims 1-15 are pending in this application, with Claims 1, 7-9, 14 and 15 being independent.

On page two of the Official Action, an issue relating to the drawings is raised. Accordingly, Fig. 12 is amended as suggested in the Official Action thereby addressing the issue.

On the top of page three of the Official Action, an issue is raised regarding editorial errors in the specification. Accordingly, the specification is amended to address the issue.

On the middle of page three of the Official Action, an issue is raised in connection with the subject matter defined by Claims 8 and 15. Accordingly, Claims 8 and 15 are amended to address the issue.

Claims 1, 7-9, 14 and 15 are amended to better define the claimed subject matter. Claims 4 and 6 are amended to correct minor editorial issues.

The Official Action rejects Claims 1-3 and 5-8 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,825,942, hereinafter *Miyaza*.

Miyaza discloses an image processor for providing improved readability of characters. *Miyaza* focuses on reduction and enlargement of a scanned image, and the issue of readability of the reduced/enlarged text. That is, text that was originally a readable size may be degraded and become unreadable during reduction. Beginning on column 12, line 46 of *Miyaza*, the reduction process is described. Character data present in the scanned image is detected by the character detecting

section 71i of the image transformer section 71. The image processing CPU 74 recognizes the original size of the characters 51 and, based on a reduction ratio, the size of the reduced characters 52 is calculated. That is, the reduction magnification for the entire image is calculated (e.g., 1/2) and then the reduction magnification is applied to the characters 52. After the reduction size of the characters 52 is calculated, the reduced size of the characters 52 is compared to a predetermined reducible threshold value 60. If the size of the reduced characters 52 is larger than or equal to the threshold value 60, the reduced characters 52 are considered to be "readable". However, if the size of the reduced characters 52 is smaller than the reducible threshold value 60, the reduction characters 52 are not "readable", a warning is posted, and the process is stopped.

Similar to the first embodiment, a second embodiment describes a character recognition section that uses a "superimposing method" in place of the character detection section in the first embodiment. Beginning in column 13, line 38, it is described that the "superimposing method" involves the data of various characters being stored in advance and successively superimposed on the non-reduced image data. When the image data matches the data of a particular character, the image data is recognized as being a character (e.g., a, b, c, d...). Once the characters are recognized, the size of the reduced characters is compared to the reducible threshold value 60, just as in the first embodiment.

Yet another alternative embodiment described beginning in column 65, line 10 of *Miyaza* involves measuring the "unrecognized character rate", i.e., the proportion of un-reduced characters that are recognized to the number of reduced recognized characters that are recognized. That is, the characters of the un-reduced data and

reduced data are recognized as described above, and if the rate of recognition meets a predetermined threshold the reduced character is "unreadable".

The specification of the pending application describes enlarging or reducing image data that includes characters. As described in the Background of the Invention section of the pending application, enlarged image data is subjected to interpolation corresponding to the magnification, and reduced image data is thinned in correspondence to the magnification. Accordingly, the enlarged/reduced data may have a distorted outline or be deformed.

When confronted with the above-noted issue, *Miyaza* judges the characters as being "unreadable" and stops the process, whereas, the presently claimed subject matter addresses this issue by outputting magnified character data.

As described in the pending application, the character code of the scanned image is recognized and the font of the characters is detected based on saved font data. Once the font is detected, based on the magnification of the image data, a certain size font is delivered to the magnified image to represent the scanned character data, thereby removing the issue of reducing/enlarging the originally scanned character data. That is, character data having the same characters and font as the original scanned character data is outputted in the appropriate size according to the magnification of the image in place of the originally scanned character data.

Accordingly, Claim 1 generally defines a code recognizer that recognizes character code from a character image included in image data to be processed. A size recognizer recognizes character sizes of the character image, and a setter sets a magnification. A magnification changer enlarges or reduces the image data

according to the magnification set by the setter. A memory section stores a plurality of font data of different sizes. A selector selects a font data from among the plurality of font data that is stored in the memory section based on the character code that is recognized by the code recognizer. An output section outputs the font data selected by the selector. Claims 7 and 8 are directed toward a method and a computer readable medium, respectively, and are generally directed toward recognition of character code from a character image included in image data to be processed, recognition of character size of the character image, setting of a magnification, selection of font data from among a plurality of font data of different sizes based on the recognized character code, the sizes and the set magnification to match with the region of the character image in the image data, and output of the selected font data.

Miyaza does not disclose selection of font data from among a plurality of font data of different sizes based on the recognized character code. Rather, *Miyaza* only discloses recognizing characters (e.g., a, b, c...), which has nothing to do with recognizing a particular font (e.g., times new roman, courier new...) in which the characters are written.

Also, *Miyaza* does not disclose outputting the selected font data. Rather, *Miyaza* discloses outputting the reduced image data (not font data saved in a memory) or stopping output if the reduced image data is un-readable.

For at least these reasons, Claim 1, 7 and 8 are allowable. Also, Claims 2, 3 and 5 are allowable at least by virtue of their dependence from allowable independent claims.

The Official Action rejects Claims 9-15 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,243,549, hereinafter *Ando*, in view of *Miyaza*.

Claim 9 defines an image processor having a combination of features including an instruction section which instructs to output image data of N pages to be processed in M sheets of recording medium, wherein N and M are natural numbers and N is not equal to M. Claims 14 and 15 are directed toward a method and a computer readable program, respectively. They define combinations of features generally directed toward instruction of outputting image data of N pages to be processed in M sheets of recording medium, wherein N and M are natural numbers and N is not equal to M, and recognition of character code from a character image included in the image data of N pages. *Ando* is relied upon in the Official Action for a disclosure of these features.

The combination of features defined by Claim 9 also includes a code recognizer that recognizes character code from a character image included in the image data of N pages, a memory section which stores a plurality of font data, a selector which selects font data from among the plurality of font data stored in the memory section based on the character code recognized by the code recognizer, the font size recognized by the size recognizer and the magnification set by the setter, to match with a region of the character image in the image data, a synthesizer which generates output image data by laying out the font data selected by the selector in the M sheets, and an output section which outputs the output image data generated by the synthesizer. The combinations of features defined by Claims 14 and 15 also include features generally directed toward selection of font data from among a plurality of font data based on the recognized character code, generation of output image data in a layout of M sheets by using the selected font data, and outputting of the generated output image data. *Miyaza* is relied upon in the Official Action for a

disclosure of these features in similar fashion as applied to Claims 1, 7 and 8 discussed above.

For similar reasons as set forth above with regard to Claims 1, 7 and 8, *Miyaza* does not disclose at least selection of font data from among a plurality of font data stored in a memory section based on a recognized character code, which is generally included in Claims 9, 14 and 15.

Claims 10-13 are allowable at least by virtue of their dependence from allowable independent claims, and because they define features that additionally define over the cited disclosures.

Claim 4 is rejected under 35 U.S.C. § 103(a) as being unpatentable over *Miyaza* in view of U.S. Patent No. 5,533,174, hereinafter *Flowers*. The Official Action relies on *Flowers* for a disclosure of a communication section which communicates with an external apparatus, wherein a selector selects compatible font data from among a plurality of font data stored in the external apparatus via the communication section. Claim 4 depends from Claim 1 and is allowable for at least the same reasons because *Flowers* does not satisfy the deficiencies of the rejection of Claim 1 discussed above. Also, Claim 4 defines features that further distinguish over the cited disclosures.

For the reasons stated above, it is requested that all the objections and rejections be withdrawn and that this application be allowed in a timely manner.

Should any questions arise in connection with this application, or should the

Examiner feel that a teleconference with the undersigned would be helpful in

resolving any remaining issues pertaining to this application, the undersigned

requests that he be contacted at the number indicated below.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

Date: <u>May 23, 2005</u>

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Fig.12

500

518 OPERATION PANEL

513 ADF

512 IMAGE READER

520
20

516 PRINT ENGINE

CONTROLLER

514

IMAGE PROCESSOR

524 BINARIZER

528 MAGNIFICATION CALCULATOR

522 CHARACTER/PICTURE DISCRIMINATOR

530 CHARACTER/PICTURE MAGNIFICATION CHANGER

526 OCR

534 SYNTHESIZER

532 FONT MEMORY

536 FORMAT CONVERTER